

**FLOW DIAGNOSTIC SYSTEM**ABSTRACT OF THE DISCLOSURE

A flow diagnostic system for a flow sensing element and impulse lines. A pressure transmitter coupled to the impulse lines provides digital pressure data to a control system. The control system provides the pressure data and real time clock readings to a diagnostic application. The diagnostic application calculates a difference between current pressure data and its moving average. A condition of the primary element or impulse lines is diagnosed from a current pressure data set relative to an historical data set. The diagnostic application is downloadable from an application service provider (ASP). The application can run on the control system, a remote computer or the ASP. A diagnostic report is preferably provided.

FOUO 09/852102